206.2 - Electrical Resistivity and Conductivity of Silicon (block and wafer forms)

SRMs 2541 through 2547 consist of single wafers intended for use as reference standards for sheet resistance and resistivity measurements utilizing the four-point probe method. SRMs 2541, 2542, and 2543 are made of Czochralski-grown, boron-doped silicon with (100) crystallographic orientation; SRMs 2546 and 2547 are float zone (111) orientation and phosphorus-doped by the neutron transmutation doping process.

SRM 2524 Optical Fiber Chromatic Dispersion Standard has been discontinued. Special-test chromatic-dispersion measurements can be arranged, for interested customers. Contact Tasshi Dennis at tasshi@boulder.nist.gov.

SRM 2525 Optical Retardance Standard has been discontinued. Special-test optical-retardance measurements can be arranged, for interested customers. Contact Paul Williams at pwilliams@boulder.nist.gov.

For further information see SP 260-131

Technical Contact: james.ehrstein@nist.gov

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM Description Unit Size	2541 Silicon Resistivity (each)	2543 Silicon Resistivity (each)	2546 Silicon Resistivity (each)	2547 Silicon Resistivity (each)
Resistivity (Ω · cm)	0.01	1	100	200